**City of Lafayette Traffic Commission Meeting Minutes**

**May 11, 2010**

**Common Council Chamber**

**Members Present:** Glenn Allen, Dallas Griswold, Leon Dickson, Larry Larrabee, Sallie Fahey, Cindy Murray, Fred Koning, Jenny Miller and Tim Bonner.

Also present: Tom Vandenberg, Traffic Engineer, BF&S

Mr. Dickson called the meeting to order.

Mr. Dickson moved to approve the minutes for the April 7th 2009 meeting; Mr. Allen noted an error in the minutes and moved to amend. The motion passed by unanimous voice vote. Mr. Dickson moved to approve the minutes as amended, Mr. Allen seconded. The motion passed by unanimous voice vote.

**New Business: Request for 4 Way Stop Sign Builder Drive and Osborne Drive**

Jenny Miller, City Engineer reported she had received a request to change the Stop signs at Builder Drive and Osborn Drive to a 4 way Stop. Ms. Miller presented a traffic study was recently completed by Tom Vandenberg, of BF&S with the recommendation that the current 2 way stop be maintained as it is. Mrs. Murray moved to accept the recommendation of the City Engineer, Mrs. Fahey seconded. The motion passed by unanimous voice vote

**Draft Traffic Signal Removal Policy-Draft attached**

Ms. Miller stated she has had inquiries regarding removing traffic signals from intersections. In particular the request was for Main St. and Ferry St and also Main St and 6th St. Mrs. Miller noted since there was not a policy in place she felt it would be a beneficial for the Traffic Commission to establish the criteria. Ms. Miller passed out copies of a Lafayette Traffic Signal Policy Removal Draft written by Tom Vandenberg, Traffic Engineer from BF&S for the members to review. Discussion ensued. After the discussion, the following changes were proposed.

- Traffic Signal Definition - Added "bicycles" when discussing the red-yellow-green signals in the second sentence
- Step 1b - Added requirement for the age of traffic data used for the warrant analysis
- Step 1e - Added requirement of the preliminary engineering study to recommend observation study scope
- Step 1h - Added requirement for the age of traffic data used for the warrant analysis
- Step 4 - For simplification, removed the "for a minimum of 90 days" verbiage from this step
- Step 5b - Removed the last sentence "Other pavement markings may be removed or added as necessary."
- Step 6 - Revised to state a minimum of 30 days or the duration recommended in the prelim eng study, whichever is longer
- Step 6a & 6b - Revised to state that the frequency will be based on the recommendations of the prelim eng study
- Step 6c - changed "observation" to "observations"

Mrs. Fahey moved to pass the Traffic Signal Removal Policy with the above discussed changes, Mr. Koning seconded. The motion passed by unanimous voice vote.

Mrs. Murray moved to adjourn, Mr. Dickson seconded. Passed

Minutes prepared by Sue Scott, Secretary

Complete audio of meeting available in the office of the Lafayette City Clerk

SUBJECT: Non-Warranted Traffic Signals
City of Lafayette Policy for Removal-**DRAFT**

## Introduction

Traffic signals are devices that provide for the orderly movement of traffic which increases the capacity of an intersection and may improve traffic safety. However, an unjustified traffic signal may cause unnecessary vehicle delay and reduce traffic safety. The installation of a traffic signal should be based on an engineering study of roadway, traffic and other conditions which has identified the justification for the signal. If changes in any of these conditions eliminate the need for the signal, consideration should be given to removing it and replacing it with an appropriate traffic control device. An engineering study should be used to assess if an existing traffic signal is no longer justified.

## Definitions

*Traffic:*

Vehicles, pedestrians, bicyclists and other means of transportation that use the highway for purposes of travel.

*Traffic Signal:*

Any roadway traffic signal by which traffic is alternately directed to stop and permitted to proceed. This includes the typical "red-yellow-green" signals for vehicles and bicycles, pedestrian traffic signals and flashing intersection control beacons (signals that flash red for at least one approach of an intersection). This does not include yellow flashing warning beacons that are used to supplement advanced warning signs or speed limit signs.

## Signal Removal Policy

The following represents the City's removal policy for traffic signals which includes the procedures before, during and after removal. These procedures will be revised as needed based on the most recent version of the Indiana Manual on Uniform Traffic Control Devices for Streets and Highways (Indiana MUTCD). This removal policy does not cover any traffic signal devices located at or in close proximity to rail crossings (such as alternating red flashing light assemblies), which would require additional removal procedures.

## Before Removal (Preliminary Engineering Study)

1) If there is reason to believe that an existing traffic signal may need to be removed, a "preliminary engineering study" will be conducted to assess if the signal is no longer justified. The study shall be in accordance with the most recent version of the Indiana MUTCD. The preliminary engineering study will include the following:
    a) Discussions concerning the changes in roadway, traffic or other conditions.
    b) Warrant analysis summary in accordance with the Indiana MUTCD. Traffic volume data used for the warrant analysis will be representative of the existing intersection traffic operations and no more than one (1) year old.
    c) Crash history and discussion concerning potential crashes due to signal removal.

d) Recommended alternate traffic control (e.g. two-way stop, all-way stop) if the signal is no longer justified.

e) Recommended scope for the observation period of the "observation engineering study" if the signal is no longer justified. As described in step 6, these scope recommendations will include the duration of the observation period, the frequency at which crash data is collected and the frequency at which traffic operations are observed. Factors to consider for the scope recommendations include the roadway classifications of the intersection, intersection crash history, the intersection traffic volumes and the impact on those volumes due to the surrounding land uses including Purdue University.

The preliminary engineering study may also include (but is not limited to) the following:

f) Any public, business, school board or governmental concerns for the traffic signal's installation and its requested removal.

g) Future traffic or roadway conditions.

h) Warrant analysis summary for recommended alternate traffic control in accordance with the Indiana MUTCD (e.g. all-way stop sign warrant analysis). Traffic volume data used for the warrant analysis will be representative of the existing intersection traffic operations and no more than one (1) year old.

i) Benefit to cost analysis for continued signal operation versus the one-time signal removal cost.

j) Intersection sight-distance analysis with the traffic signal control and with the recommended alternate traffic control.

k) Traffic operations analysis (e.g. vehicle delay, vehicle queuing) of the existing traffic signal control and the recommended alternate traffic control.

2) The results of the preliminary engineering study will be discussed during the City's Traffic Commission Meeting.

a) If the preliminary study assesses that the signal is no longer justified, an "observation engineering study" will be performed as described in steps 3 through 7.

b) If the preliminary study assesses that the signal is still justified, the following steps should be performed:

i) Continue to monitor the crashes, traffic conditions and roadway conditions on a periodic basis as needed.

ii) The preliminary study should be revised when the crashes, traffic conditions or roadway conditions suggest the need for the traffic signal removal. The results of the revised study will be discussed during the City's Traffic Commission Meeting and an "observation engineering study" will be performed as described in steps 3 through 7.

**Before Removal (Observation Engineering Study)**

3) As needed, the local media, businesses, schools, governmental agencies and emergency services will be notified that the traffic signal is under observational study.

4) An "observation engineering study" of the traffic signal will be performed. This observation study serves two purposes:

    a) The results of the preliminary engineering study will either be confirmed or disproven by monitoring the crashes and traffic operations when the existing signal is placed in flashing operation. This allows for the alternate traffic control recommended in the preliminary study to be "tested" before the traffic signal is completely removed.

    b) Creates a transition period which warns motorists and pedestrians that the existing traffic signal will soon be converted to an alternate, un-signalized traffic control.

5) During the "observation engineering study", the intersection will be prepared for the recommended alternate traffic control by performing the following:

    a) Removing or reducing any sight-distance restrictions as necessary.

    b) Installing the alternate traffic control signs or devices. Stop bar pavement markings along the uncontrolled approaches should not be removed at this time.

    c) Placing the signal in a flashing operational mode that is comparable to that of the recommended alternate traffic control (e.g. all approaches flash red for an all-way stop). Signal heads will be covered as needed.

    d) Installing the "Traffic Signal under Study for Removal" (W3-H12) signs at the intersection where it is visible to all road users. Ideally, the signs should be located next to the vehicle and pedestrian signal heads along each approach.

6) During the "observation engineering study", the following observations will be performed for a minimum of 30 days or the duration recommended in the "preliminary engineering study", whichever is greater:

    a) The crashes will be monitored, analyzed and summarized periodically. The frequency of which this occurs (e.g. once a week, once a month, etc) will be determined during the "preliminary engineering study".

    b) Periodic observation of traffic conditions during the peak hour(s) including pedestrian/vehicle interaction, vehicle delays and vehicle queuing. The frequency of which traffic is observed (e.g. once a week, once a month, etc) and the time periods of observation (e.g. the AM/midday/PM peak hours, weekday, weekend, month, season, if Purdue University needs to be in spring/fall session or not, etc) will be determined during the "preliminary engineering study".

    c) During the monitoring period, immediate action may be needed to convert the signal back to its original operating state based on the crash experiences or traffic observations.

7) After the observation period, a summary of steps 5 and 6 will be included in the observation engineering study with a recommendation to either remove the signal, return the signal back to original operations or to continue the observational period. The results of the observation study will be discussed during the City's Traffic Commission Meeting. Steps 8 through 10 will be performed if the signal is to be removed.

**During Removal**

8) As needed, the local media, businesses, schools, governmental agencies and emergency services will be notified that the traffic signal is to be removed.

9) The appropriate "above-ground" traffic signal equipment will be removed which may include the signals heads, poles, foundations, pull boxes, overhead cables and controller cabinet equipment. Underground conduit and cables may be abandoned in place or removed as needed. Pavement markings and signage will be revised as needed in accordance with the recommended alternate traffic control and the Indiana MUTCD.

**After Removal**

10) The intersection may be periodically monitored to assess the effectiveness of the alternate traffic control. The extent of the monitoring process after the signal is removed will be determined on a case-by-case basis and may include the following:

    a) Any public, business, school board or governmental concerns for the alternate traffic control.

    b) Summary of crashes.

    c) Periodic observation of traffic conditions during the peak hour(s) including pedestrian/vehicle interaction, vehicle delays and vehicle queuing.